

REMARKS

Claims 1-33 are pending. Claims 1, 4, 5, 9-13, 19-21, 23 and 30-32 are amended herein.

The drawings have been objected to as being informal. Applicant respectfully submits formalized drawings attached hereto.

The examiner has rejected claims 1-33 under 35 U.S.C. 102(e) as being anticipated by Rao Patent No. 6,480,118. Claims 1, 13 and 23 are independent claims. The examiner states in support of the rejection of claim 1 that:

“Rao teaches a method for characterizing a drilling hazard in a proposed wellbore, comprising: determining a well plan including at least a wellbore trajectory, see (col. 1, lines 10-15, 55-57, and col. 4, lines 35-45); estimating a likelihood of occurrence of, a position along the trajectory and a severity of consequences of at least one drilling hazard, see (col. 4, lines 45-65 and col. 7, lines 40-45, and col. 8, lines 10-35); and displaying on a representation of at least a portion of the wellbore trajectory, at least one of the position of the likelihood and the severity of the at least one drilling hazard, see (col. 9, lines 30-40, and col. 10, lines 60-67, and col. 4, lines 45-65, and col. 8, lines 10-20, lines 45-67).”

The rejection of independent claims 13 and 23 are similar and thus addressed below concurrently.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegall Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). Rao fails to disclose, teach or suggest all of the elements claimed in Applicant's independent claims 1, 13 and 23. Therefore, Applicant respectfully requests that the rejection be withdrawn and a Notice of Allowance be issued.

Rao teaches using acoustical systems to look ahead of the drill bit to identify “geological or environmental features” (col. 7, lines 40-54; col. 4, lines 45-65; and col. 8, lines 10-35). Rao by definition cannot characterize “a drilling hazard in a proposed wellbore” because Rao teaches looking ahead in the current wellbore to detect a geological or environmental feature. Further,

Rao fails to disclose or teach "estimating a likelihood of occurrence of, a position along the trajectory and a severity of consequences of at least on drilling hazard," as well as other elements of the claimed invention. As previously submitted by Applicant in its October 3, 2004 response, Applicant defines "drilling hazard" as an undesirable occurrence during drilling, giving examples including lost circulation, stuck pipe and taking a kick. (Applicant's specification, pages 2 and 8). Applicant's invention characterizes an occurrence or drilling event that is desired to be avoided and/or mitigated, it is not addressing identifying a geological or environmental feature.

Applicant respectfully amends the claims herein by replacing "drilling hazard" with - - drilling event - -, to more clearly identify Applicant's claimed invention and differentiate the different uses of the same term utilized in Rao. As illustrated in Applicant's title of the invention, the invention relates to characterizing and forecasting a drilling event. The examiner at page 10 of the April 18, 2005 Final Office Action sets out that Rao does not teach or suggest undesirable occurrences during drilling.

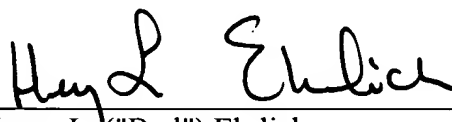
Applicant respectfully submits that Rao does not anticipate Applicant's claimed invention and that the current amendment clarifies the distinction between Rao and Applicant's claimed invention.

The examiner is invited to contact Applicant's below named representative to expedite issuance of a Notice of Allowance.

Respectfully submitted,
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DATE

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